

CANCER'S NEMESIS: RESEARCH OR BUREAUCRACY?

As Director of a Specialized Cancer Center, Dr. Hoagland recently participated in a 3-day meeting in Naples, Florida, of officials of the National Cancer Institute and Directors of most of the nation's Cancer Centers. The Centers are focal points for the conduct of cancer research, funded by N.C.I., and the meeting encouraged full discussion of concerns, problems, trends, etc. Dr. Hoagland felt that the meeting failed to give weight to basic research's role in the attack on cancer and, on the third day asked and was granted permission to address the group. The substance of his remarks follows:

"I have listened to our deliberations for two days and have become increasingly troubled. In spite of our abysmal ignorance about cancer, and the statistics confirming our continued failure to influence its overall morbidity and mortality there has been essentially no mention of basic research, or the role of the Specialized Cancer Center. Yet if an outsider were listening in he'd be convinced that the cancer problem is on the verge of being solved.

"To counteract my gloom I wrote a little parable last night which I will now pass along to you. I ask you to imagine medicine without Xrays: pretend that in the recent past the medical

profession was confronted with the following major problem:

physicians all over the country were frustrated for lack of a way of seeing inside their patients. Clearly if broken bones and all sorts of internal pathology could be actually seen by doctors, an enormous breakthrough in medicine would have been achieved.

"The federal government, patterning its response on the earlier (1972) drive to conquer cancer, sets as an additional national objective the Conquest of Opacity. The motto "See Inside Soon" becomes a household word. Hundreds of consultants are brought to Washington to prepare a PLAN which eventually fills several volumes. The PLAN contains a helpful summary of the consultants' efforts consisting of a large diagram that cancer professionals throughout the country can hang on their office walls. The diagram is in the form of a circle and in the center is THE ANSWER labeled triumphantly "Inside Seen". Concentrically arranged outside the center are pie-shaped segments representing the planners' suggestions for how to reach this central goal. These ideas are mostly ingenious things to do to see through patients: suspending them before powerful electric lights, thinning them on low calorie diets, improving techniques of opening them up surgically, widening bodily orifices, using mirrors; all supplemented by various psychiatric approaches to persuade the patient the pathology isn't there. Since these various methods are familiar to everyone, everyone is enthusiastic about them and they are allocated large sums of money.

"Some basic research scientists had been invited to join the planners and they too got a piece of the pie. It would have been a larger piece had they not kept arguing that we simply have no idea how to see through people, or even animals, and we'll have to do more basic research on bio-transparency. Also, they blew it when they were asked for a timetable. They said that when you don't know where you are, you can't tell when you'll get somewhere. They pointed out that Columbus in mid-Atlantic in 1492 also had this shortcoming, but subsequently made an important breakthrough. This didn't go down well--it was considered evasive. Furthermore, when they were asked how they would go about making people transparent, they spoke vaguely of picking some very smart young people and letting them figure out what to do. This was characterized as buckpassing.

"One scientist thought it would not be a bad idea to persuade some specialists in the fundamental properties of electromagnetic radiation to get into the act. Maybe nature produced some hitherto unrecognized rays that could penetrate tissues better than ordinary light. Most of the consultants agreed that this man had lost the sense of the mission.

"I sense at these meetings that, contrary to the bald cancer statistics, there is a widespread conviction that we're conquering cancer; that therefore basic science has little to contribute.

"Since cancer statistics don't justify this attitude, I've tried to find other explanations and have come up with the following:

- 1) Science seems not to be strongly represented among the Cancer Center leadership. This is largely a clinical gathering. But this doesn't help in and of itself.
- 2) The natural human propensity for self-delusion: in particular, the physicians' assumption that if he's treating someone, he's curing them. Most physicians and care-oriented persons who are, I would surmise, the majority of those represented here, support goals and objectives related to things they're familiar with. Without basic research experience and indeed uneasy about research, they see the solution of the cancer problem as related to patient care. Failure to improve morbidity or mortality means that something is wrong with the patient care modality. Or, at best, that patient-oriented "research" is called for. They are convinced that federal cancer funds are for them and their patients, because they're on the firing line. They resent the use of that resource for things that are foreign and unfamiliar and can't easily be related to cancer.

"This group by pure numbers, if nothing else, cannot help but strongly influence N.C.I. They convince the policy-makers of the wisdom of the clinical approach. They are rewarded by the shaping of policy to fit their needs. And at each turn of the

cycle basic science--the only sure way to gain insight into the problem--gets the squeeze.

"An immense cancer-care bureaucracy is building across the country using monies the public thought would be used to help find a cure or prevention. The bureaucracy is manned by physicians whose patient-care activities acquire dignity and prestige under the guise of clinical "research". The tragedy is that these practitioners, who deal daily with the misery of cancer, have become instruments in the stifling of fundamental research.

"You'll recall the tale of the Emperor's New Clothes? I submit that too many clinical oncologists see the emperor fully clothed. The basic scientist stands on the sidelines meekly pointing to the reality of the emperor's nudity.

"The basic research community lacks the force of numbers and eloquence to fight the battle alone.

"IF SCIENCE IS TO BUILD THE KNOWLEDGE-BASE NEEDED TO ELIMINATE CANCER, THE CLINICAL PROFESSIONALS MUST STAND FIRMLY WITH THE BASIC SCIENTISTS AS VIGOROUS ADVOCATES OF CONTINUED GENEROUS SUPPORT OF FUNDAMENTAL RESEARCH."